## N° 18,326



## A.D. 1909

Date of Application, 9th Aug., 1909 (Patent of Addition to No. 9592, 22nd Apr., 1909) Complete Specification Accepted, 2nd Dec., 1909

## COMPLETE SPECIFICATION.

Communicated by Siemens and Halske Aktiengesellschaft, of 3 Askanischer Platz, Berlin, in the German Empire, Electrical Engineers.

"Improvements in Switch Plugs for Telephone Exchanges."

We, SIEMENS BROTHERS AND COMPANY LIMITED, of Caxton House, Westminster, in the County of London, Electrical Engineers, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention refers to improvements in connecting plugs for telephone exchanges as described in Specification No. 9592/09 in which the connecting cord at the part where it enters the said plug is passed through a helical spring or springs.

In the present invention the helical spring is wound in such a manner that the first few turns near the plug are wound under tension in close contact with each other, but subsequently the remaining turns of the spring are wound with a gradually increasing pitch, by which means the desired increasing flexibility is obtained.

The attached drawing shows a connecting plug in accordance with this invention. At the end of the plug where the cord enters, the helical spring 2 is fixed, the part a of which is wound under tension with its turns in close contact, the remaining part, b, for example, being wound with the turns of a gradually increasing pitch as previously mentioned. If the spring is bent in the direction shown by the arrow, the compression side of the spring will offer an increased resistance to bending, since the turns of the part a are already in close contact, and at the same time the tension side of the spring will offer a greater resistance to opening for like reasons.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

A switch plug for telephone exchanges as described in Specification No. 9592/09 in which a part of the spiral spring surrounding the plug cord is wound with its successive turns in close contact and the remaining turns thereof with a gradually increasing pitch substantially as described.

Dated this 6th day of August, 1909.

SIEMENS BROTHERS & CO., LIMITED.

The common seal of Siemens Brothers & Co., Limited, was hereto affixed by order of the Board.

ALEX. SIEMENS,
Director.
ALFRED SABINE,
Secretary.

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